



ANNUAL REPORT

OF THE

Medical Officer of Health


FOR THE

BOROUGH OF CHELMSFORD.

1905.

CHELMSFORD :

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Chelmsford,
February 14th, 1906.

TO THE CHAIRMAN AND MEMBERS OF THE
SANITARY COMMITTEE.

GENTLEMEN,

I beg to submit herewith my Annual Report for 1905 as Medical Officer of Health, dealing with the sanitary condition of the Borough and the health of its inhabitants.

This year the Local Government Board have added yet another table to be filled up. This Table V. deals entirely with the Infantile Mortality, and is, I consider, a most important one. I have also this year been able to complete Table I., and give the averages for the past ten years. Previously I have not been able to do this, owing to the fact that I could not find the necessary figures for 1894.

The year under consideration has not, from the point of view of Infectious Disease, been so satisfactory as the three preceding years. The year 1904 was exceptionally favorable. This year we have had a somewhat severe outbreak of Scarlet Fever. During the last six weeks of the year Measles also has been epidemic, necessitating the early closing of the Schools.

From the point of view of sanitary improvements, I am glad to report that (1) the new Reservoir at Long Stomps has been completed, and also with it the new 10-inch pumping main; (2) the very necessary Sewer at Bundick's Hill has been laid; (3) an auxiliary 18-inch Pipe Sewer has been laid in the King's Head Meadow; (4) the new Pump has been fixed in Borehole in Mildmay Road Yard, and is working very satisfactorily.

Population and Area.

The census population in 1901 was 12,581.

The number of inhabited houses was 2,755.

The average number of persons per house was 4.61.

The estimated population in June, 1905, was 13,320.

This gives an estimated increase for the year of 170.

The natural increase, or the increase of Births over Deaths, is 92.

The area of the Borough in acres, exclusive of area covered by water, is 2,033.

Births.

The total number of Births registered in the Borough for the year was 293.

This gives a Birth-rate of 21.99 per 1,000.

Of these, 147 were males and 146 were females.

The number of Births registered this year is very low indeed—lower, in fact, than any year in the last ten years, with the exception of 1899, when 290 Births only were registered.

The Birth-rate of 21.99 per 1,000 is actually the lowest recorded in the last ten years. The average Birth-rate for the past ten years is 25.94. The highest Annual Birth-rate was registered in 1900, when it was 29.47.

Deaths.

The total number of Deaths registered in the Borough for 1905 was 176. This gives a gross Death-rate of 13.21 per 1,000. But in this number (176) there were 32 deaths

of non-residents or aliens. This gives a corrected nett return of 144 deaths, and a nett Death-rate of 10.8 per 1,000.

This is the lowest Death-rate recorded for the past ten years. The nett Death-rate for 1904 was very low—i.e., 11.10 per 1,000; but the death return for the past year is very exceptional. As will be seen by Table I., the average Death-rate for the past ten years is 13.93 per 1,000. Therefore, this year we have a Death Return of 3.13 below the average of the past ten years.

The ages of those who died in the Borough, excluding aliens, were as follows:—

30	or	20.9	per cent.	were	under	1	year	of	age.
14	„	9.2	„	were	over	1	and	under	5 years of age
7	„	4.6	„	„	5	„	15	„	
8	„	5.6	„	„	15	„	25	„	
35	„	24.4	„	„	25	„	65	„	
50	„	34.8	„	were	over	65	years	of	age

In regard to the causes of Death set out in Table IV., there are—

11 or 7.6 per cent. of Deaths due to Zymotic Diseases.

12 or 8.3 per cent. of Deaths due to Phthisis and other Tubercular Diseases.

11 or 7.6 per cent. of Deaths due to Cancer and Malignant Diseases.

19 or 13.2 per cent. of Deaths due to Bronchitis and Pneumonia.

14 or 9.1 per cent. of Deaths due to Heart Disease.

77 or 53.6 per cent. of Deaths due to all other causes.

Infantile Mortality.

The number of Deaths under 1 year that occurred in the Borough this year was 30, or 20.9 per cent. of the total deaths. This gives an Infantile Death-rate of 102.38 per 1,000 Births, and although this is not a very high rate of Infantile Mortality is, as will be seen by Table I., considerably more than the average of the past ten years.

The chief causes this year of Infantile Deaths comes under two causes—i.e., Premature Births and Atrophy, or Marasmus. The return under Premature Births is very high indeed.

This year, fortunately, not one death has been caused in Infants by any form of Diarrhoeal Disease. This is most unusual, as this is usually the chief factor of Infantile Deaths.

The causes in full, with the ages at death, will be found in Table V. There can be no doubt whatever that much of this Infantile Mortality is preventable. Experience and investigation alike shew this. There can be no doubt that much of it is due to want of knowledge and lack of intelligent care on the part of mothers. It is an unfortunate fact that although the general Death-rate throughout the country has markedly diminished during the past half-century, the Infantile Death-rates have shewn but little diminution, but remain deplorably high. This, added to the fact of a very greatly reduced Birth-rate, is a matter of the greatest moment. It is, in fact, a national disaster.

Phthisis or Pulmonary Tuberculosis have this year caused nine deaths, giving the very low death-rate of .67 per 1,000.

The deaths due to this disease during the past ten years are :—

		1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.	1897.	1896.	} per 1000
Deaths	...	9	13	11	10	16	16	18	14	16	14	
Death Rate	...	·67	·98	·84	·76	1·27	1·30	1·49	1·18	1·35	1·76	

The Cancer Death-rate shews practically no alteration—i.e., 1.5 per 1,000.

Zymotic Diseases.

Eleven deaths from Zymotic Diseases have this year been registered, giving a Zymotic Death-rate of .82 per 1,000.

The Zymotic Death-rate per 1,000 for the past ten years has been :—

1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.	1897.	1896.
.82	.84	1.61	.86	2.94	1.22	1.06	1.58	2.17	1.76

Notifiable Infectious Diseases.

In Table III. the Cases of Infectious Disease notified during the year are tabulated in detail.

In all, ninety-seven cases have been notified, as against thirty-seven in 1904. This large increase has been due entirely to the number of cases of Scarlet Fever.

I here give the number of cases of Infectious Disease that have been notified in the Borough since 1906 :—

	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896
Diphtheria.....	15	2	20	25	131	66	13	13	11	44
Typhoid Fever .	6	2	4	18	11	6	10	9	4	36
Erysipelas.....	6	9	5	14	3	5	9	6	5	12
Scarlet Fever ...	70	20	44	28	18	37	87	8	3	8
Puerperal Fever	0	0	1	0	2	1	2	0	0	1
Small - Pox	0	4	1	3	0	0	0	0	0	0
Chicken - Pox ..	0	0	0	63	0	0	0	0	0	0
	—	—	—	—	—	—	—	—	—	—
	97	37	75	151	165	115	121	36	23	101
	—	—	—	—	—	—	—	—	—	—

I am indeed glad to report that we have had no Small-pox in the Borough this year. I would here remark that Chicken-pox now is not a notifiable disease. Notification

was adopted only during the year 1902, when Small-pox was so prevalent throughout the country.

In regard to Diphtheria although this year there is an increase in the number of cases notified over that of the previous year, yet the number is well below the average of the past ten years. The cases were usually of a mild type and scattered in various parts of the Borough. I am glad to say that now for two years no death from Diphtheria has been certified.

The virulence of Diphtheria appears to vary very much from time to time. Although the clinical signs probably vary a little, the mortality varies immensely.

Six cases of Typhoid Fever occurred during the year, one of which ended fatally, and that from one of the complications of this disease—i.e., Larangeal Ulceration.

In regard to the cases of Scarlet Fever, it will be seen that the notifications were seventy in number. This disease was epidemic in the Borough during the Autumn. Fortunately, however, this epidemic ceased in December. In regard to these cases I do not think I can do better than to give again my Special Report on this epidemic that I presented to the Sanitary Committee in November last.

Fairfield,

Chelmsford.

21—11—'05.

TO THE CHAIRMAN AND MEMBERS OF THE
SANITARY COMMITTEE.

GENTLEMEN,

Since July there has been notified in the Borough :
Scarlet Fever, 40 cases ; Diphtheria, 7 cases ; Enteric Fever,
4 cases ; Erysipelas, 4 cases.

It is in regard to the cases of Scarlet Fever that I now lay this report before you.

Of these 40 cases, 39 have been notified since Sept. 3, 1905. The starting point of these cases was in the North Ward, seven cases occurring in two families living in close apposition to each other, but as far as I can gather they had no direct connection one with the other. The members of the one family attended the Victoria Schools, but the children of the other family had been excluded from school for some months on account of ringworm. There was, however, two things in common in these cases:—

- (1) They had a common milk supply.
- (2) Each of these cases were affected with Nephritis as a sequæ to Scarlet Fever.

The milk supply was obtained from a dairy outside the Borough. The fact of the milk being questioned was reported to the Medical Officer of Health of the Rural Sanitary Authority, and an answer was received, after some interval of time, that the dairy in question was found to be in a satisfactory condition.

From that date (3—8—'05) cases have been notified with frequency and regularity from all parts of the Borough. From the North Ward 17 cases have been notified, and from the South Ward 23 cases have been notified.

In each instance the cases have been carefully investigated. The Milk Supply has been ascertained. The School in question has been ascertained; and the drainage of the house has been inspected. Of these cases, ten had attended the British, eight the Victoria, seven St. John's, and one the Roman Catholic Schools. Seven had attended private schools, and the rest of the cases had not attended school at all.

In regard to the milk supply, 9 patients had been supplied with milk from the Co-operative Society; 7 by Patching Hall Dairy; 4 by Rimmer, Galleywood; 4 by French, New Writtle Street; 4 by Webb, Roxwell; 3 by Miller Bros., White House Farm; and 1 each from Rowe, Fewell, Saunders, Spalding, Wight, Technical Institution, and Hodge, Widford.

Of the Schools, I advised the closure of the British Schools and St. John's Schools.

I thought it advisable to close St. John's because three members of one family in various parts of the School had been in close contact with a case of Scarlet Fever and were at School when this case was notified.

The British School was closed because one boy was found actually to be peeling in the School.

This case is somewhat remarkable. This boy, the son of a large dairy farmer and one of a family of nine, was absent from school one week—I think the third week in September. From enquiries made I ascertained that during this week this boy did not feel well. He had a sore throat, followed by a slight rash. It was also ascertained that practically the whole family were affected more or less in the same way; but beyond a slight feeling of indisposition there appeared to be no feeling of actual illness.

In consequence no notice was taken of this series of slight illnesses, and the parents did not consider it necessary to seek medical advice. Therefore, what I think must have been a series of cases of Scarlet Fever, slight in degree, passed without notice. Of course, no attempt at isolation was made. The family followed their usual vocations, and the children went as usual to school.

This boy and his brother were, of course, at once sent home and the school promptly closed. That same day I com-

municated with Dr. Waller, their family doctor, who visited the family that afternoon, and who, I believe, notified two members of this family to be suffering from Scarlet Fever. Dr. Thresh was also communicated with, and, with him, the next day I visited this dairy.

The dairy and the cowsheds were found to be in good order. Dr. Thresh felt that, on the evidence before him, he could not in any way advise that the milk supply could be stopped.

This is an example of an exceedingly difficult case. I have no hesitation in saying that I believe the parents had not the slightest suspicion that these cases were anything like Scarlet Fever; otherwise, I feel sure they would at once have sought advice.

But it is easily seen how easily a very serious epidemic might be started, and the difficulty of holding anyone legally responsible. The milk from this dairy supplies one large institution and two large dairies in the Borough.

It is, however, very fortunate that since this case was discovered only five other cases have been notified in connection with the British Schools.

I would in regard to Scarlet Fever point out that it has been prevalent of late in many parts of the County, and it may be taken that the many cases that have occurred in the Borough are practically only a part of a large general epidemic.

In conclusion, I should like to say that the Medical Officer of the Joint Hospital Board has shewn much courtesy in receiving those cases that required removal with the utmost promptitude.

Further, I would also say that the Sanitary Inspector has worked hard in helping to have these cases removed quickly, and the necessary disinfection accomplished.

I have the honor to be,

Your obedient Servant,

H. W. NEWTON,

M.O.H.

Of the other Infectious Diseases, Measles has also been very prevalent in the Borough during the last two months of the year. Measles not being a notifiable disease, it is quite impossible to estimate the number of cases that occurred. Special attention was given to the Schools, and the large number of children who were absent giving Measles as the cause, it was considered advisable, under your directions, to close all the Public Elementary Schools fourteen days before the end of the term. I would here wish to say that I think it most desirable and necessary when the Sanitary Authority issue an order to close these Schools on account of the outbreak of any Infectious Disease that the Sunday Schools should voluntarily close also; otherwise I fail to see the utility of closing the Day Schools when the authorities of the Sunday Schools do not at once close also. I quite recognise that the Sanitary Authorities have no power to order the closing of Sunday Schools. This is, I think, very unfortunate. I was very surprised to find, in one case, how opposed the Sunday School Authorities could be to these Schools being closed, even when it was very plainly pointed out that it was for the general well-being of the children who attended. I believe, however, that at the request of the Sanitary Committee the Town Clerk has written to all the Sunday Schools asking that in future when an order closing the Day Schools has been issued that the Sunday Schools will at once close voluntarily and remain closed during the time that the order is in force.

House Accommodation.

The house accommodation in the Borough continues to be ample, and the great majority of the houses are in a good sanitary condition. Comparatively few cases of overcrowding have been brought to light, and these have all been dealt with satisfactorily. The house-to-house inspection of the Sanitary Inspector, which has been considerably interfered with by the epidemic of Scarlet Fever, is still being carried on. I regret, however, that more work in this direction has not been accomplished, as I regard it as being most valuable, and in very many, or perhaps the majority of cases, it is the only means of bringing to light any nuisances that exist.

I am glad to report that a very definite step has been taken in regard to Union Yard. The Corporation of the Borough have proposed to acquire the lower half of this yard, so that it can be dealt with in a satisfactory manner. The Local Government Board have recently held an enquiry in this matter, and I sincerely trust they will agree with the Corporation in this matter. These houses have always been very difficult to deal with. They have always been occupied by the most undesirable tenants, who do not attempt to keep these houses in a clean or sanitary condition. They have been owned by someone who has done as little as it was possible to do to keep them in repair, so that two have been condemned as unfit for habitation. I quite recognise that in every town people of this class have to be housed. As I understand the Corporation have the offer of the property at a very reasonable sum, they can, if they do acquire this property, put it into a good state of habitable repair. The drainage and w.c. accommodation can be then kept in good order at a very reasonable cost. Further, I think the tenants would be easier to deal with if they are tenants of the Corporation. Therefore, I shall be indeed glad to hear that the Local Government Board acquiesces with this scheme, which, if it is

a success, may be extended to other properties of a similar character—i.e., French's Square, Badeley Square, etc.

Sewerage and Drainage.

Under this heading I am pleased to report that the Bundicks Hill Sewer has at last been satisfactorily completed, and the houses in this locality are being connected with this sewer. This now does away with what I consider to be a grave danger to the Admirals Park Well.

Further, I can report that an auxiliary 18-inch pipe sewer has been laid in the King's Head Meadow.

I am indeed glad, also, to report that the question of Sewer Ventilation has been, I hope, satisfactorily settled. A Local Government Board enquiry was held in regard to this question, and I understand as a result of this enquiry the sewers are to be ventilated as quickly as possible. I hope indeed that this ventilation will be both thorough and adequate, otherwise it is possible that this system will be condemned because it is not adequate. I mean by this that all the sewers in the Borough should be thoroughly ventilated, and that it should not be confined to one or two sewers.

The sewage itself is still disposed of on the Sewage Farm in Springfield Parish, and is still under the management of a Joint Sewerage Committee.

The sewers of the Borough have been regularly and thoroughly flushed throughout the year.

Removal and Disposal of House Refuse.

This work continues to be done by the Corporation under the direction of the Surveyor. The removal of the refuse is done regularly and well. Complaints made are, I believe, few

in number. The refuse is carted out of the Borough and deposited in an old gravel pit in Springfield Parish. But complaints have again been made that this procedure gives rise to a nuisance, and in consequence notice has been given to the Corporation to discontinue disposing the town refuse in this pit by the owner. Therefore another site for the disposal of this refuse has to be sought.

There can be no question that town refuse is very valuable as a manuring agent and is of considerable value to farmers as such; but great care must be taken in distributing this refuse, otherwise it causes a great nuisance. At least on four occasions new sites have had to be discarded for this refuse on account of the nuisance it creates.

I am afraid that the only safe and permanent solution of this difficulty is a Refuse Destructor. Sooner or later one must be built, and I am afraid until this comes the disposal of the House Refuse will be a source of trouble and difficulty.

Water Supply, &c.

The Water Supply to the Borough continues to be derived from three sources, as previously reported upon.

- (1) Deep Well, Mildmay Road.
- (2) Burgess Well.
- (3) Admirals Park.

The supply of water is maintained by pumping sixteen hours per day (average between 8,000 and 9,000 gallons per hour) out of the new Borehole at Mildmay Road; about 60,000 gallons per 24 hours from Burgess Well; and pumping the whole of the water out of the Reservoir at the spring in Admirals Park, which amounts to 90,000 gallons per 24 hours.

Thus it will be seen that the quantity of water available for use is both sufficient and adequate—more, in fact, than has been available for some time.

The quality of the water also continues to be excellent. It has been frequently analysed, and on all occasions it has proved to be of a high degree of purity.

I am sorry to report, however, that Burgess Well has shewn definite signs of failing in its supply. Should this continue it will be a matter of serious moment as regards the general supply of water available for a daily and regular supply. It may, however, be only of a temporary character. But I still hold the opinion it is unwise to have to look to two surface wells for a large and regular water supply to a large community. Not only is such a supply liable to run short at intervals, but also the risk of pollution has to be thought of, and this is very considerable. I still, therefore, urge that a further supply of water should be sought for, and in this locality I see no other means available than a second deep well.

I have previously reported that the sewer has been now laid at Bundicks Hill. Admirals Park Well is now therefore removed from the danger of being contaminated by the cess-pools that previously existed in close proximity to it. The Borough Surveyor has kindly given me a list of the streets in the Borough which have a constant and intermittent supply of water, which I herewith attach. I am glad to see so many streets have a constant supply, and I hope year by year the constant service will be increased. It is a matter that I feel very strongly upon, and I am quite certain that the time has arrived when the whole of the Borough should have a constant supply of water. The intermittent service has many great inconveniences and many dangers.

List of Streets in the Borough of Chelmsford which have a Constant & Intermittent Supply of Water.

NOVEMBER, 1905.

Constant Supply.		Intermittent Supply.	
Rainsford Road. Park Avenue. South Primrose Hill. Maltese Road. Rainsford Lane. Coval Road. Burgess Well Road. Townfield Street. Viaduct Road. Glebe Road. Victoria Crescent. Park Road. Market Road. King Edward's Avenue. Threadneedle Street. Churchyard, from Day's Shop to Shire Hall. Widford. Wood Street.	London Road, from Wood Street down to the Infirmary. Elm Road. Upper Bridge Road, from Cherry Garden Lane down to and including Bellevue Cot- tages. Moulsham Street, from Elm Road to Southborough Road. Southborough Road. York Road. Redcliffe Road. Marlborough Road. Queen Street. Upper Anchor Street. Moulsham Street, from South- borough Road to Queen Street (West Side only). Moulsham Street from Queen Street to Stone Bridge, con- tains a few houses which have a constant supply.	Water on from 6 a.m. to about 2 p.m. on Week-days, and from 6 a.m. to about 10.30 a.m. on Sundays. Primrose Hill. Broomfield Road. Rectory Lane. Fairfield Road. Duke Street, from Broom- field Road to Day's Shop on the North Side, and to the Golden Lion Public-house on the South Side. New Street. Legg Street. Church Street. Cottage Place. Victoria Road. Regina Road. High Street, from Stone Bridge to Judge Tindal's Statue. Part of houses have supply until about 10.30 a.m. only.	On Pumping Main direct into the Town from Hall Street. Water on from 6.30 a.m. to 10.30 a.m., both Week-days and Sundays. Moulsham Street, from Queen Street to Stone Bridge, except for a small number of houses, the supply to which is constant. Hamlet Road. High Street, from Stone Bridge to Judge Tindal's Statue. Part of houses have supply till 2 p.m. Friars Place. London Road, from Friars Place to the Iron Bridge. Water on from about 6.30 a.m. to about 12.30 p.m. on Week- days, and from about 6.30 a.m. to about 11 a.m. on Sundays. Tindal Street. High Street, from Conduit to Judge Tindal's Statue. London Road, from High Street to the Iron Bridge. Springfield Road. St. John's Road. Mildmay Road. Lady Lane. Manor Road. Goldlay Road. Baddow Road. Van Dieman's Road. Hall Street. Roman Road. Church Street. Grove Road. George Street. Moulsham Street, from South- borough Road to St. John's Road (East Side only). Writtle Street. New Writtle Street. Lower Anchor Street. Upper Bridge Road, from New Writtle Street up to but not including Bellevue Cottages. Baker Street. Seymour Street. Wolseley Road.

Nuisances. Proceedings for their Abatement.

Once more I can report that no nuisances of any moment has been brought to notice.

Places over which the Council have Supervision.

LODGING HOUSES.—There are still two only in the Borough. They are frequently inspected, and have always been found to be clean and kept in conformity with the bye-laws.

SLAUGHTER HOUSES.—These are also frequently and regularly visited. They are kept clean and well drained. No nuisance has been found in connection with them.

DAIRIES, COWSHEDS, AND MILKSHOPS.—The Milkshops have been visited frequently, and have always been found to be kept clean. I have had, however, to suggest to many that the milk kept for sale in these shops should be kept covered, in order to exclude, as far as possible, the contamination of the milk by flies, dust, etc.

In conjunction with your Chairman, and accompanied by the Sanitary Inspector, I made a special visit to all the Dairies and Cowsheds in the Borough. A very searching examination was made by your Chairman and myself, with the result that we found many sanitary defects, and in three cases we found very gross neglect of all sanitary laws; in two of these cases we found an absolute want of cleanliness that was almost appalling in character. These cases have now all been remedied, and a monthly report is now to be made by the Sanitary Inspector on all the Dairies in the Borough.

Chiefly as the result of our inspection, and at the direction of your Chairman, the following notices have been sent to all the Dairies, etc., in the Borough:—

BOROUGH OF CHELMSFORD.

DAIRIES, COWSHEDS, AND MILKSHOPS.

The TOWN COUNCIL desire to direct the ATTENTION of COWKEEPERS, DAIRYMEN, and PURVEYORS OF MILK to the following PROVISIONS applicable to DAIRIES, COWSHEDS, and MILKSHOPS:—

1. It is unlawful for any person following the trade of Cowkeeper, or Dairyman, or Purveyor of Milk, or being the occupier of a Milkstore or Milkshop

(a) To allow any person suffering from a dangerous infectious disorder, or having recently been in contact with a person so suffering, to milk cows, or to handle vessels used for containing Milk for sale, or in any way to take part or assist in the conduct of the trade or business of the Cowkeeper or Dairyman, Purveyor of Milk, or occupier of a Milkstore or Milkshop, so far as regards the production, distribution, or storage of Milk; or

(b) If himself so suffering or having recently been in contact as aforesaid, to milk cows, or handle vessels used for containing milk for sale, or in any way to take part in the conduct of his trade, or business, as far as regards the production, distribution, or storage of milk;

until in each case all danger therefrom of the communication of infection to the Milk, or of its contamination has ceased.

2. Every Purveyor of Milk, or person selling milk by retail, shall take all reasonable and proper precautions, in and in connection with the storage and distribution of the milk and otherwise, to prevent the exposure of the milk to any infection or contamination.

3. He shall not deposit or keep any milk intended for sale—

(a) In any room or place where it would be liable to become infected or contaminated by impure air, or by any offensive, obnoxious, or deleterious gas or substance, or by any noxious or injurious emanation, exhalation, or effluvium, or

(b) In any room used as a kitchen or as a living room; or

(c) In any room or building or part of a building communicating directly by door, window, or otherwise with any room used as a sleeping room, or in which there may be any person suffering from any infectious or contagious disease, or which may have been used by any person suffering from any such disease and may not have been properly disinfected; or

(d) In any room or building or part of a building in which there may be any direct inlet to any drain.

4. He shall not keep milk for sale, or cause or suffer any such milk to be placed, in any vessel, receptacle, or utensil which is not thoroughly clean.

5. He shall cause every vessel, receptacle, or utensil used by him for containing milk for sale to be thoroughly cleansed with steam or clean boiling water after it shall have been used, and to be maintained in a constant state of cleanliness.

6. He shall not cause or suffer any cow belonging to him

or under his care or control to be milked for the purpose of obtaining milk for sale—

(a) Unless, at the time of milking, the udder and teats of such cow are thoroughly clean; and

(b) Unless the hands of the person milking such cow, also, are thoroughly clean and free from all infection and contamination.

Every person offending against the foregoing regulations is liable to a penalty of £5.

Attention is also directed to Section 3 of The Infectious Disease (Notification) Act, 1889, which provides—

Where an inmate of any building used for human habitation within a district to which this Act extends is suffering from an infectious disease to which this Act applies, then, unless such building is a hospital in which persons suffering from an infectious disease are received, the following provisions shall have effect, that is to say—

The head of the family to which such inmate (in this Act referred to as the patient) belongs, and in his default the nearest relatives of the patient present in the building, or being in attendance on the patient, and in default of such relatives, every person in charge of or in attendance on the patient, and in default of any such person the occupier of the building shall, as soon as he becomes aware that the patient is suffering from an infectious disease to which this Act applies, send notice thereof to the Medical Officer of Health of the District.

Every person required by this section to give notice who fails to give the same is liable on summary conviction to a fine not exceeding Forty Shillings.

The Town Council, realizing the great importance of the Milk Supply being free from risk of infection, strongly recommend Dairymen, Cowkeepers, and Milksellers, in case of illness in their family, or amongst their servants, to give notice without delay to the Medical Officer of Health, so that he may visit the case and determine whether the disease is infectious.

By order,

THOS. DIXON,

Town Clerk.

Chelmsford,

December, 1905.

I regard this matter very seriously, and I hope that this notice will be regarded by all Dairymen and Purveyors of Milk very carefully. I hope also that all the regulations and penalties attached to this notice will be strictly enforced. The purity of and the cleanliness attached to the supply of milk is a matter of the utmost importance to any community. I have impressed upon the Sanitary Inspector the importance of seeing these rules and regulations thoroughly carried out, and I trust he will be able to pay considerable attention to this matter. Whilst reporting on this matter I would say that the dairymen in the Borough have told me that they think it is somewhat unfair that the Dairies outside the Borough have been more leniently treated by the Rural Authority than those who are in the Borough. If that is so I agree, but I cannot think they are correct in their statements. In any case, I would again urge that a Joint Inspector should be appointed to report impartially and equally to each authority. But I believe again the Rural Authority have declined to agree to the appointment of such an Inspector. As the matter stands at present, I should think by far the greater portion of the

milk consumed in the Borough is produced from dairies that are out of the Borough, and of course no authority or supervision can be exhibited over these dairies by your Sanitary Officers unless a Magistrates' Order be first obtained. I personally am strongly of opinion that under these considerations the appointment of a properly qualified Veterinary Inspector is most desirable.

•
FACTORIES AND WORKSHOPS.—Again these have received careful attention.

OFFENSIVE TRADES.—Two only in the Borough. The premises are frequently inspected. They have always been found to be clean and well kept.

BAKEHOUSES.—Again, the Bakehouses in the Borough have been the subject of careful supervision. They are clean and well kept. There is one underground bakehouse in the Borough. This question was again brought before your Committee and dealt with. It is clean and well ventilated.

Methods of Dealing with Infectious Disease.

I have previously reported upon the methods adopted in dealing with cases of Infectious Disease. The same method is still adopted and works very satisfactorily.

Disinfection of clothing, bedding, etc., is carried out by the Joint Hospital Authority. Disinfection of infected premises is done by your Sanitary Inspector.

Isolation Hospitals.

The Isolation Hospitals available for the Chelmsford Rural and Urban Districts remain as previously reported—i.e., Baddow Road, Coval Lane, and Galleywood, with the

addition of a further building specially erected for Small-Pox.

I hope and believe that during the ensuing year the additions to the Baddow Road Hospital will be completed. Then, I hope, the very primitive buildings in Coval Lane and Galleywood will be used no longer as Isolation Hospitals.

During the past year 69 cases of Infectious Disease were removed to the Isolation Hospitals. Of these, 40 were removed from the South Ward and 28 from the North Ward. Of these 68 cases—

9	were cases of	Diphtheria
55	„	Scarlet Fever
4	„	Enteric Fever

This shews that 71 per cent. of the cases of notifiable Infectious Disease were removed to the Isolation Hospital for treatment.

Improvements in Progress or Required.

- (1) The completion of the Joint Isolation Hospital.
- (2) An increased Water Supply that will give to each house and w.c. in the Borough a constant supply of water.
- (3) A Refuse Destructor.
- (4) The complete and thorough ventilation of all the Sewers.

I append to this Report the Report of the Sanitary Inspector.

I have the honor to be, Gentlemen,

Your obedient Servant,

H. W. NEWTON,
M.O.H.

ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH FOR 1905
FOR THE BOROUGH OF CHELMSFORD,

On the administration of the Factory and Workshop Act, 1901, in connection with
FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, & HOMEWORK.
1.—INSPECTION. Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries.)			
WORKSHOPS (Including Workshop Laundries.)	133	Nil.	Nil.
WORK PLACES			
HOMEWORKERS' PREMISES ...	2	Nil.	Nil.
Total	135	Nil.	Nil.

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :*</i>				
Want of Cleanliness	12	12		
Want of Ventilation	1	1		
Overcrowding	1	1		
Want of drainage of floors				
Other nuisances				
†Sanitary accommodations :—				
Insufficient				
Unsuitable or defective } ‡ See Below				
Not separate for sexes }				
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (s. 101)	Nil.			
Breach of special sanitary require- ments for bakehouses (ss. 97 to 100)	23	23		Nil.
Failure as regards lists of outworkers (s. 107)				
Giving out work to be done in premises which are—				
Unwholesome (s. 108)				
Infected (s. 110)				
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (s. 109)	Nil.			
Other offences				
Total	37	37	Nil.	Nil.

* Including those specified in Sections 2, 3, 7 and 8 of the Factory Act as remediable under the Public Health Acts.
† For districts not in London state here whether Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council; and if so what standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced.
‡ Yes. Section 22 Public Health Acts Amendment Act, 1890, has been adopted. All w.c.'s supplied with efficient water supply and proper flushing apparatus.

3.—OTHER MATTERS.

Class.	Number.
Matters notified to H M. Inspectors of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (s. 5) :—	
Notified by H.M. Inspectors	
Reports (of action taken) sent to H.M. Inspectors	
Other	
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	1
In use at the end of the year	1
Homework :—	
<i>List of Outworkers*</i> (s. 107) :—	
Lists received	3
Addresses of outworkers { forwarded to other Authorities ... received from other Authorities...	13
<i>Homework in unwholesome or infected premises :—</i>	
Notices prohibiting homework in unwholesome premises (s. 108)	
Cases of infectious disease notified in homeworkers' premises	1
Orders prohibiting homework in infected premises (s. 110) ...	1
Workshops on the Register (s. 131) at the end of the year... ..	81
Important classes of workshops, such as workshop bake-houses, may be enumerated here. {	
Total number of Workshops on Register	81

* The Lists should be received twice in the year. The year's figures required in the Table are those obtained by adding together the two half-yearly totals.

FACTORY AND WORKSHOP ACT.

Report of the Medical Officer of Health on the Administration of the Act in the Urban Sanitary District of Chelmsford during the Year 1905.

(A.) Classification and Inspection.

Total No. of Work-shops in the Dis-trict, as per Register } 81 Including { Tenement Workshops
Domestic Workshops
20 Retail Bakehouses
2 Laundries
59 Other Workshops } Not including { Domestic Factories
Workplaces

Total No. of visits of Inspection made during the year { (a) by M.O.H.
(b) by Sanitary Inspector, 133.

Note as to the chief }
workshop industries } Dressmaking and Tailoring.
in the district }

(B.) Sanitation.

	Workshops.	Domestic Factories and Domestic Workshops.	Workplaces.
CLEANLINESS—General condition			
„ No. of Notices served under P.H. Acts ..			
„ No. of Notices to cleanse, under Sec. 2 ...	12		
„ Legal Proceedings			
AIR SPACE—General condition			
„ No. of Notices to abate over-crowding ...	1		
„ No. of Notices to affix card, Sec. 3 (4) ...			
„ Legal Proceedings			
VENTILATION—General condition			
„ No. of Notices under P.H. Act	1		
„ Legal Proceedings			
MEANS OF VENTILATION—Action taken under Sec. 7			
DRAINAGE OF WET FLOORS—Action taken under Sec. 8			

(C.) Additional Sanitation for Retail “Bakehouses.” Sec. 97 to 102.

No. of such premises } 20 Note as to their
in the District } general sanitary
condition }

Action taken during the year as to Retail Bakehouses :—

	No. of defects found.	Notices served.	Legal Proceedings.	Defects remedied.	Remarks.
As to closets, etc., s. 97 ...	9			9	2 new w.c.'s built
As to water cisterns, s. 97 ...	2			2	New cisterns fixed
As to drain openings, s. 97...	—			—	
As to limewashing, etc., s. 99	12			12	
As to sleeping places, s. 100	—			—	

Any proceedings under Sec. 98 as to }
retail bakehouses sanitarily unfit }

Result

(Ca.) Underground Bakehouses.

No. of such premises in District, 1.

No. Certified by District Council under Sec. 101 (2), 1.

No. Inspected, 1.
Proceedings

(D.) Sanitary Conveniences.*(Only to be reported on in places where Section 22 of the P.H.A.A. is in force)*

Date of adoption of Sec. 22 of the Public Health Acts Amendment Act, 1890

No. of defects discovered thereunder }
 in factories or workshops during the } 9
 year

{ (a) Closets insufficient or unsuitable, 9.
 { (b) Closets not separate for sexes

No. of Notices issued under the Section, Verbal Notices.

(E.) Safety from Fire. *(Not to be reported on by M.O.H.).***(F.) Home Work.** Sections 107 to 115.

Total No. of Lists of Outworkers }
 received during the year } 3, representing {
 { Employers.
 { Contractors.
 { 13 Outworkers.

Classification of Lists received :—

<i>Outwork in connection with :—</i>	NO. OF LISTS RECEIVED.			Total No. of such Employers or Contractors	Total No. of such Outworkers in the District.	REMARKS.
	Up to Feb. 1.	To Aug. 1st.	Total to Dec. 31st.			
Wearing Apparel ...						
Lace, lace curtains, etc. ...						
Cabinet making, etc. ...						
Electro-plate ...						
File-making ...						
Fur-pulling... ...						
Cables and chains... ...						
Anchors and grapnels ...						
Cart gear, etc. ...						
Locks, keys, etc. ...						

Outworkers' premises—No. inspected, 2.

No. found unwholesome

Action as to unwholesome premises

Any prohibition as to infected houses (s. 110), 1.

(G.) General.

No. and nature of sanitary defects {
 reported to the Authority by H.M. {
 Inspectors during the year

Action taken in consequence {

No. of infringements reported by {
 Sanitary Authority to H.M. {
 Inspector (*e.g.*, s. 133)

General Observations (*with signature and date*) :—

TABLE I.

CHELMSFORD URBAN DISTRICT.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1905 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED.					TOTAL DEATHS IN PUBLIC INSTITUTIONS.	Deaths of Non- residents registered in Public Institutions.	Deaths of Residents registered in Public Institu- tions beyond the District.	NETT DEATHS AT ALL AGES.	
		Number.	Rate*	Under 1 year of Age		At all Ages.						Number.	Rate*
				Number.	Rate per 1,000 Births registered.	Number.	7	8					
1	2	3	4	5	6	7	8	9	10	11	12	13	
1895	11,575	305	26·30	36	117·8	233	20·13	45	26	...	206	19·00	
1896	11,700	296	23·29	35	118·2	184	15·72	29	26	...	151	13·76	
1897	11,840	332	28·04	27	85·13	196	16·55	68	45	...	151	12·79	
1898	11,977	325	27·08	24	73·84	206	17·16	70	46	...	160	13·3	
1899	12,116	290	23·29	29	100·00	187	15·43	56	40	...	147	12·14	
1900	12,250	394	29·47	35	88·83	247	20·16	50	28	...	219	15·96	
1901	12,589	371	28·48	41	110·51	236	18·69	81	41	...	195	15·44	
1902	12,794	296	22·74	29	99·65	212	16·77	60	28	...	174	13·76	
1903	13,000	327	25·15	32	98·65	204	15·69	71	48	...	156	12·00	
1904	13,150	336	25·63	22	65·47	183	13·91	64	37	...	146	11·10	
Averages for years 1895-1904	12,299	327·2	25·94	31	97·00	208·8	17·01	59·4	36·5	...	170·5	13·93	
1905	13,320	293	21·99	30	102·38	176	13·21	55	32	...	144	10·8	

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 2,033. Total population at all ages, 12,581, at census of 1901.

Number of Inhabited Houses 2,755

Average number of persons per house 4·61

I.		II.		III.	
Institutions within the District receiving sick and infirm persons from outside the District.		Institutions outside the District receiving sick and infirm persons from the District.		Other Institutions, the deaths in which have been distributed among the several localities in the District.	
Chelmsford Infirmary ... ..	...	Nil		Nil	
Chelmsford Union Workhouse Infirmary ...	...			

Is the Union Workhouse within the District? Yes

TABLE III.
CHELMSFORD URBAN DISTRICT.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1905.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.		No. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.	
	At all Ages.	At Ages — Years.					North Ward.	South Ward.	North Ward.	South Ward.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.				
Small-pox
Cholera
Diphtheria
Membranous Croup
Erysipelas
Scarlet Fever
Typhus Fever
Enteric Fever
Relapsing Fever
Continued Fever
Puerperal Fever
Plague
Totals

Isolation Hospitals—

41

28

51

46

—

6

11

46

34

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97

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TABLE IV.
CHELMSFORD URBAN DISTRICT—CAUSES OF, AND AGES AT, DEATH DURING YEAR 1905.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICTS AT SUBJOINED AGES.						DEATHS IN LOCALITIES (AT ALL AGES).		DEATHS IN PUBLIC INSTITUTIONS.	
	All ages.	Under 1 year	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards	North Ward.		South Ward.
Small-pox ...	5	1	2	2	...	...	...	4	1	...
Measles ...	2	...	2	...	...	...	...	2	...	...
Scarlet Fever ...	2	...	2	...	...	...	...	1	1	...
Whooping Cough ...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Croup	...	...	...	...	...	...	...	...	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus	...	...	...	...	...	...	...	...	...	...
Enteric	1	...	...	...	1	...	...	1	...	...
Other continued	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza	1	...	...	...	...	...	1	...	1	...
Cholera ..	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	1	...	1	...	...	...	...	...	1	...
Enteritis ...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	9	...	1	1	2	5	...	5	4	2
Other Tubercular Diseases	3	1	...	1	...	1	...	2	1	1
Cancer, Malignant Disease	11	...	...	...	...	...	...	4	7	4
Bronchitis ...	14	5	1	...	...	2	...	8	6	6
Pneumonia ...	5	1	...	...	...	1	...	2	3	...
Pleurisy ...	1	...	...	...	...	...	...	...	1	...
Other Diseases of Respiratory Organs	...	...	...	...	...	...	...	...	...	...
Alcoholism	2	...	...	...	...	2	...	1	1	...
Cirrhosis of Liver }	7	7	...	...	...	...	...	4	3	...
Venereal Diseases										
Premature Birth ...	1	...	...	...	...	1	...	1	9	6
Diseases and Accidents of Parturition	14	...	...	1	...	5	7	5	3	4
Heart Diseases	5	...	...	...	3	1	...	2	1	2
Accidents ...	1	...	1	...	...	1	...	...	...	...
Suicides ...	...	15	4	1	2	11	...	26	33	30
All other causes	59	...	...	...	...	...	...	...	...	...
All causes	144	30	14	7	8	35	49	68	76	55

TABLE V.
CHELMSFORD URBAN DISTRICT—INFANTILE MORTALITY DURING THE YEAR 1905.
Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	{ Certified ... { Uncertified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Infectious Diseases.	{ Small-pox ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Measles ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Scarlet Fever	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Diarrhoeal Diseases.	{ Diphtheria: Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Diarrhoea, all forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wasting Diseases.	{ Enteritis (<i>not Tuberculous</i>)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Gastritis, Gastro intestinal Catarrh	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Premature Birth...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	{ Congenital Defects	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Injury at Birth ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Want of Breast-milk	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	{ Atrophy, Debility, Marasmus...	2	1	..	1	..	3	1	..	..	..	..	..	..	..	..	..	..
	{ Tuberculous Meningitis...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Tuberculous Peritonitis: Tabes Mesenterica }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Erysipelas ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Syphilis ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Rickets ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (<i>not Tuberculous</i>)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Convulsions	1	..	1	1	..	2	..	..	1	..	1	..	2	..	..	..	..
	Bronchitis...	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..
Other Causes	Laryngitis ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pneumonia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Suffocation, overlaying ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total		10	2	1	2	..	5	1	1	2	..	2	..	3	..	..	1	30

District (or sub-division) of Chelmsford Urban.
Births in the Year 1905

Population (estimated to middle of 1905), 13,320.

SUMMARY of WORK done by the SANITARY
INSPECTOR in the Urban District of
Chelmsford during the year ended 31st
December, 1905.

Complaints received	64
Nuisances detected without complaint	974
Nuisances abated	901
Notices served.....	363
Summonses taken out.....	Nil
Convictions	Nil
Cottages inspected	568
Lodging Houses (inspected weekly)	2
Slaughter Houses (inspected weekly)	8
Bakehouses (visited every month).....	20

DAIRIES, COWSHEDS, AND MILKSHOPS :—

Cowsheds 7, Dairies 9, Milkshops 17 (inspected monthly). All Cowsheds and Dairies limewashed or whitewashed twice a year.

New drainage has been provided for two Cowsheds, two yards by side of Cowsheds re-gravelled, one Dairy enlarged and put in proper repair.

Filthy houses cleansed, Sec. 46 Public Health Act, 1875 ..	9
Houses disinfected	81

PATIENTS REMOVED TO ISOLATION
HOSPITAL :—

Scarlet Fever	55
Diphtheria	9
Typhoid Fever	3
Overcrowding abated	5
Houses placed in habitable repair	13
Houses closed	—
Cisterns cleansed, repaired, or covered	56
Animals improperly kept removed.....	18
Samples of water taken for analysis	8
Cesspools emptied	2
Sink Waste Pipes disconnected	19
Glazed Gulley Traps fixed	56
Water Closets cleansed or repaired	63
Flushing Apparatus provided to Water Closets	55
Flushing Apparatus repaired	47
Storage Tanks provided	31
Drains tested	53
Drains unblocked	48
Drains ventilated	13
Drains intercepted	21
Soil Pipes found defective	11
Waste of Water detected	53
Ashpits repaired	19
Galvanized Iron Sanitary Dust Bins provided	23
Accumulations of Manure removed	105
Manure Pits built or repaired	3
Urinals cleansed or limewashed.....	21
Gutterings repaired or cleaned out	32
Dilapidated Paving of back yards repaired	6

ELEMENTARY SCHOOLS WITHIN THE
BOROUGH, viz. :—

Victoria	Boys.
„	Girls.
„	Infants.
Friars Council	Boys.
„	Girls.
„	Infants.
St. John's	Boys.
„	Girls.
„	Infants.
St. Peter's	Infants.
Roman Catholic	Mixed.

The School Buildings have been fumigated and the
drains tested twice during the year.

CARAVANS inspected 31

FACTORY AND WORKSHOPS ACT.

Workshops inspected	81
Overcrowding abated	1
Workrooms limewashed	12
Water Closets cleansed or repaired	9
Back yards re-paved	1
Ventilation	1

OFFENSIVE TRADES.

There are only two in this Borough—viz., Messrs.
Dixon and Sons and J. Budds. These are
frequently inspected.

WILLIAM KIRKHAM BAKER,
Cert. Sanitary Institute,
Sanitary Inspector.

